

CLAIMS

1/ Method for scaling peak power amplitudes in a signal at a transmitter before submitting said signal to a power amplifier, said method comprising the steps of:

- calculating scaling factors for a pulse train comprising a group of at least two peaks, which power exceed a predefined threshold, said scaling factor, for one peak taking into account an influence on said peak which occurs if at least one other peak of said group is applied a scaling factor;
- applying said calculated scaling factors to said respective peaks of said group.

2/ Method according to claim 1, wherein said influence depends on the distance between said peak and said at least one other peak.

3/ Method according to claim 1, wherein said step of calculating scaling factors comprises the sub-steps of:

- calculating corrected signals for each peak taking into account the influence of the other peaks;

- Calculating for each peak a scaling factor starting from said corrected signal.

4/ Method according to claim 1, wherein said scaling factors for said train of pulses guaranty that the power of the scaled peaks belonging to said group reaches said predefined threshold.

5/ Method according to claim 1, wherein said scaling factors for said train of pulses guaranty that the average power of the clipped signal is higher than a predefined threshold value.

6/ Method according to claim 1, wherein at least two iterations of said method are successively applied to said signal followed by a step of hard clipping

7/ Method according to claim 1, wherein said signal is a signal comprising a plurality of single carrier signals constituted by a superposition of several CDMA signals.

8/ Transmitter comprising means for scaling peak power of a signal, said transmitter further comprising a power amplifier for amplifying said signal, wherein said transmitter comprises said means for scaling peak power:

- means for calculating scaling factors for a pulse train comprising a group of at least two adjacent peaks which power exceed a predefined threshold, said scaling factor for one peak including the influence on said pulse train which occurs if at least one other peak of the group is applied a scaling factor;
- means for applying said calculated scaling factors to said respective peaks of said group.

9/ Transmitter according to claim 8, wherein said means for scaling peak power is implemented on a DSP or a FPGA.

10/ Transmitter according to claim 8, wherein it is used in a base station of a CDMA radio communication network.